

RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA.in an animal, the method comprising the steps of detecting an amplified product according to claim 2 and detecting or diagnosing a disease associated with epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA.

19. The method of claim 17 wherein the disease is a malignancy or premalignancy.
20. The method of claim 18 wherein the disease is a malignancy or premalignancy.
21. A method for monitoring an animal or human for a malignant or premalignant disease, wherein the malignant or premalignant disease is associated with a tumor-derived or tumor-associated RNA that is epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA, or any combination thereof, the method comprising the step of:
  - 1) detecting RNA associated with the malignant or premalignant disease qualitatively or quantitatively , wherein the RNA is epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof, according to a method comprising the steps of:
    - a) extracting mammalian RNA from plasma or serum, wherein a fraction of said extracted RNA comprises epidermal growth factor RNA, epidermal growth factor

receptor RNA, her-2/neu RNA, c-myc RNA, heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof;

- b) amplifying or signal amplifying said fraction of the extracted RNA or corresponding cDNA, wherein amplification is performed qualitatively or quantitatively using primers specific for the tumor-derived or tumor-associated RNA or cDNA corresponding thereto, to produce an amplified product; and
- c) detecting the amplified product produced from RNA or cDNA corresponding thereto.

22. A method for monitoring an animal or human for a malignant or premalignant disease, wherein the malignant or premalignant disease is associated with tumor-derived or tumor-associated RNA that is epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof, the method comprising the step of:

- 1) detecting qualitatively or quantitatively RNA associated with the malignant or premalignant disease, wherein the RNA is epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, or heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof, according to a method comprising the steps of:
  - a) extracting mammalian RNA from a bodily fluid, wherein a fraction of said extracted RNA comprises epidermal growth factor RNA, epidermal growth factor receptor RNA, her-2/neu RNA, c-myc RNA, heterogeneous nuclear ribonucleoprotein A2/B1 RNA or any combination thereof;

- b) amplifying or signal amplifying said fraction of the extracted RNA or cDNA corresponding thereto, wherein amplification is performed qualitatively or quantitatively using primers specific for the tumor-derived or tumor-associated RNA or cDNA corresponding thereto, to produce an amplified product; and
- 5 c) detecting the amplified product produced from said RNA or cDNA corresponding thereto.

23. A method for selecting an animal or human with cancer for an epidermal growth factor-directed therapy comprising the step of performing the method of claim 1 using blood  
10 plasma or serum from said animal or human and selecting the animal or human for an epidermal growth factor-directed therapy when epidermal growth factor RNA is detected in the animal or human's plasma or serum.

24. A method for selecting an animal or human with cancer for an epidermal growth factor-directed therapy comprising the step of performing the method of claim 2 using a bodily  
15 fluid from said animal or human and selecting the animal or human for an epidermal growth factor-directed therapy when epidermal growth factor RNA is detected in the animal or human's plasma or serum.

20 25. A method for selecting an animal or human with cancer for an epidermal growth factor receptor-directed therapy comprising the step of performing the method of claim 1 using blood plasma or serum from said animal or human and selecting the animal or human for